Product Evaluation

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: RC-408

Effective Date: July 1, 2014
Revised: November 1, 2014
Re-evaluation Date: August 2018

Product Name: Minimum 26-Gauge PBU Metal Roofing Panels Over Steel Purlins

Manufacturer: Metal Building Components, Inc. (MBCI), L.P., a division of NCI, L.P.
14031 West Hardy
Houston, TX 77060
(281) 445-8555

General Description:
The PBU metal roofing panel is minimum 26-gauge, coated steel. The 26-gauge panel has an actual coverage of 36". The metal roof panels have a 3/4" rib height. The panel conforms to ASTM A 653 Grade E, 80,000 psi yield point and galvanized.

Limitations:

- **Roof Framing:** Install the metal roofing panels over open steel purlins. Use purlins that are a minimum 16-gauge steel (55,000 psi minimum yield).
- **New Roof Framing Attachment:** The roof framing must meet or exceed the uplift requirements of the IRC or IBC. Install the roof covering as required for resistance to wind loads.
- **Design Wind Pressures:** Table 1 specifies the design pressure uplift load resistance.
- **Roof Slope:** Do not install the panels on roofs with a roof slope less than 1/2:12.
- **Installation Over an Existing Roof Covering:** Not permitted

Table 1: Attachment of Minimum 26 gauge PBR Metal Roofing Panels to Steel Purlins

Design Wind Pressure (psf)	Purlins	Attachment of Panels to Steel Purlins
-52.5	Minimum 16 gauge; 5'-0 3/16" on center	Fasteners at 6" o.c.

Installation Instructions:

- **General:** Install the metal roofing panels in accordance with the manufacturer's recommended installation instructions and this evaluation report.
- **Steel Purlins:** Table 1 specifies the minimum thickness of the steel and maximum spacing of the purlins.
- **Underlayment:** NA
- **Attachment of Metal Roofing Panels to the Steel Purlins:** Secure the PBU metal roofing panels to the steel purlins with No. 14 self-drilling, hex head with a 5/8" O.D. washer. Locate a line of fasteners along each purlin. Table 1 specifies the fastener pattern and the spacing of the fasteners. Use fasteners long enough to ensure a minimum penetration of 3 pitches of thread below the steel purlin.
- **Panel Side Laps:** Stitch the panels together with minimum 1/4"-14 x 7/8" Lap Tek screws with a sealing washer. Space the fasteners at 12" on center along the length of the side lap.
- **Trims, Closures, and Accessories:** Install the components, such as the eave trim, rake trim, ridge trim, hip trim, and valley trim as required by the manufacturer.

Note: The manufacturer's installation instructions must be available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.